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Subject: FS Modeling Tools
Date: 01/14/2009 12:58 PM

Is it possible for EPA to start looking at the sediment data using readily available geostastical software? Do we have to wait for the LWG tool? Stanford has a great program called SGeMs for 3-D modeling. This has been used on other sites to Krieg core intervals to get vertical profiles, and produce 3-D concentration modeling of rivers. It allows large quantities of data to be easily visualized. You can even determine the probability of exceeding a threshold of concern using a tool called "krieking variance". An example at SETAC showed this being used with benthic thresholds. They also used it to calculate sediment volumes for a variety of scenarios for the FS - volume can be provided with a range, and uncertainty can be quantified.

See the link below for more information:

<http://sgems.sourceforge.net/>

https://pangea.stanford.edu/~aboucher/research.php?rg_id=53&rgpr_id=59

-Jennifer

-----Original Message-----

From: [Blischke.Eric@epamail.epa.gov](#) [mailto:[Blischke.Eric@epamail.epa.gov](#)]
Sent: Monday, January 12, 2009 11:06 AM
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Subject: Fw: FS Milestones

Below is the response that I sent to the LWG last week regarding the FS milestone table submitted last month. We will discuss at this week's TCT.

Eric

----- Forwarded by Eric Blischke/R10/USEPA/US on 01/12/2009 11:04 AM -----

| | |
|---|---------|
| Eric Blischke/R10/USE PA/US | To |
| 01/07/2009 11:50 AM | cc |
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| FS Milestones | Subject |

Bob, Jim and Rick, below are EPA Comments on the Draft FS Schedule - Key Milestones. This was submitted to us via email on December 15, 2008. We would like to discuss these comments at the upcoming January 14, 2009 Management Meeting and begin setting meeting dates, times and locations. In addition to the milestones identified below, we should also be tracking the RI check-ins (from a scheduling perspective) and application of the weight of evidence framework in the FS.

Milestones:

RAOs Meeting: We agree that a meeting to discuss RAOs for the FS in late January is warranted. This meeting would benefit from a set of refined RAOs to serve as a starting point for the discussion. As we have discussed in the past, we believe that an RAO for surface water is required. In addition, we believe that an RAO that focuses on minimizing recontamination potential is also required. It is unlikely that we will finalize RAOs at this meeting. EPA recommends building in a reasonable time-frame (e.g., two weeks) to finalize refined RAOs following the meeting.

Draft GIS Tool Meeting: We agree that a meeting to discuss the GIS tool in late January will be beneficial. At the meeting, EPA would like to discuss the feasibility of developing a 3-dimensional GIS tool to allow the evaluation of sediment volumes in addition to areas.

ARARs/Points of Compliance Meeting: EPA agrees that a meeting on ARARs and points of compliance in mid-March is appropriate. Postponing this meeting until mid-March will allow EPA to review the information on ARARs provided to us earlier and pursue our own internal discussions.

Treatment Beneficial Reuse and Market Survey: This is a relatively straight forward deliverable. EPA expects to provide comments within 30 days following receipt of the Treatment Beneficial Reuse and Market Survey.

GIS Tool and Early PRGs to EPA: EPA understands that delays in the finalization of tissue-residue TRVs has resulted in a delay in the development of PRGs. We would like to understand the magnitude of this delay and approaches for streamlining the PRG development process.

AFT Model: As with all the check-ins, we need to understand what information will be provided prior to the meeting and what is a reasonable EPA response time. The LWG has suggested a few days. It is likely that we will need more than "a few days" given the complex nature of this topic.

Treatment Technology Screening Table: This is a straight forward deliverable. EPA expects that we will be able to review this table within a 30 day review period.

AOPC Check-in: The LWG should provide draft AOPCs 2 weeks prior to the meeting. EPA expects to have performed its own evaluation of AOPCs using the PRGs and GIS tool. As stated above, it is likely that we will need more than "a few days" given to provide feed back following the meeting.

Disposal Site Screening Table: EPA agrees that a two week turnaround is reasonable.

Draft RI Report Review: The FS Milestone Table did not list the Draft RI Report Review. EPA expects that RI Report to be submitted in mid-June. EPA would like to ensure that we have a minimum of 3 months to focus solely on the RI review. As a result, it is critical that items 1 - 9 on the FS milestone table be resolved prior to submittal of the draft RI report. In addition, EPA is planning on a 2 month expedited draft RI Report review focused on the baseline human health and ecological risk assessments and key elements of the RI Report that could impact the FS. The goal of this expedited review is to focus on those elements relative to the draft FS and remedial action alternatives screening step (e.g., updated PRGs). Beginning mid-August, EPA will take a time out from completing our review of the draft RI report to focus on the alternative screening step. We expect this time out to last until mid to late-September. Once EPA and the LWG have reached agreement on the remedial action alternatives screening step, EPA will turn our attention to the draft RI with the expectation of delivering final comments in December 2009.

Alternatives Screening Check-in. EPA needs materials two-weeks ahead of time and two weeks to 30 days to respond to the LWG.

Draft FS to EPA by March 2010. EPA agrees that a draft FS by March 2010 is an achievable goal. Everything we do from RAOs to review of RI to Alternatives Check-in should be focused on achieving this goal.

Process:

Overall Approach for FS Process: EPA agrees with the overall approach for the FS process as described with the caveat that we will need more time for the check-in process as described below.

Description of Check-In Process: EPA requests that meeting materials be provided two weeks prior to the check-in meeting date. Agreements or other paths forward should be documented within two weeks following the meeting.

Agreed Goals for the FS Document: EPA agrees with the stated goals for the FS document.

Alternatives Screening Check-in Details: EPA agrees that this statement captures EPA's position. We are interested in fleshing out some of the details of this process.

We look forward to discussing this further at next week's management meeting.

If you have any questions about this, please contact me directly.

Thanks, Eric